

Jeopardy Assessment

for the proposed incidental taking authorization of the Butler's gartersnake

Beverly Hills Trail - Wirth Park Segment
City of Brookfield, Waukesha County, Wisconsin

Background

The state-threatened Butler's gartersnake was listed in 1997 and is the smallest of the five Wisconsin gartersnake species. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists). Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid- to late summer.

The Butler's gartersnake is a colonial species that is restricted to several southeastern counties in Wisconsin. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring. Additional surveys and monitoring have found that Butler's gartersnakes often occur in very large numbers on even relatively small sites (i.e. 400+ snakes detected on a 20-acre site) and can occur, sometimes in high numbers, on highly disturbed and degraded sites. Populations on disturbed sites can most likely be sustained if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to the sites.

Jeopardy Assessment

The Beverly Hills Trail is part of the City of Brookfield Greenway Corridor Recreational Plan. The approximately 2,000 foot trail will connect the Beverly Hills Trail from Pheasant Drive to Wirth Park. It will extend and replace a mowed trail that presently occurs along the same alignment with an asphalt surface. The purpose of the new trail is to provide improved recreational access and secondarily to provide alternative emergency access to Wirth Park. The City minimized the amount of impact to the snake habitat during project design by decreasing the width of the asphalt portion of the trail to eight feet from ten and fourteen feet. The City will construct a Wetland Enhancement Area that will enhance and improve habitat for the snake. The Wetland Enhancement Area will restore previously drained and filled wetlands by removing fill, grading, reestablishing hydrology, and reestablishing native plants. Educational signs on wetland function and Butler's gartersnake will also be added to the trail.

This project will be constructed in Wirth Park in proximity to the North Branch of Underwood Creek in suitable Butler's gartersnake habitat that is part of a significant conservation (Tier 3) site. This project has the potential to cause incidental take of the Butler's gartersnake, however the Department has determined that the proposed project has taken appropriate measures to minimize impacts to the Butler's gartersnake, the taking is not likely to jeopardize the continued existence or recovery of the state population of the Butler's gartersnake or the whole plant-animal community of which it is a part, and the action has benefit to the public that justifies the action.

Conservation Measures

The conservation measures listed below must be met in order for the pending Incidental Take Authorization (ITA) to be issued and remain in effect once issued:

Required Conditions:

1. Snake fencing was placed on the site prior to snake emergence in 2009 to avoid take of the snake in areas of suitable habitat that will be lost. The snake fencing has been installed per the Department's Snake Fencing Requirements and must be maintained from March 16 through November 5 each year until the date that onsite construction has been completed.
2. The area of disturbance associated with the culvert installation will be fenced off with snake exclusion fencing, and the two culverts that will be installed within suitable Butler's gartersnake habitat will be installed during the snake's active season.
3. The area of disturbance associated with the culvert installation at the North Branch of Underwood Creek will be mowed routinely after March 15 until the culvert installation portion of the project is complete. The mowing should maintain a height of no greater than 4". If the mowing height is not maintained a qualified person must walk in front of the mower and remove any snakes encountered to suitable habitat outside the project impact area.
4. The wetland enhancement area will be enclosed in snake exclusion fencing and all work will be completed prior to any trail construction. All non-native species and previous fill material will be removed and clean topsoil brought to the area. The area will be re-graded and hydrology reestablished. A seed mix consisting of native species and designed for the wetland enhancement area will be used.
5. All trees and woodland and wetland buffer seed mixes used throughout the project area will consist of native species, and all equipment will be cleaned to prevent the spread of invasive species.
6. Signage will be added to the trail including a Butler's Gartersnake Educational Sign at one location and a Wetland Functional Value Educational Sign by the Wetland Enhancement Area.